JOURNAL of DENTISTRY for CHILDREN

PUBLISHED BY THE AMERICAN SOCIETY
OF DENTISTRY FOR CHILDREN

Vol. IX SECOND QUARTER 1942

CONTENTS

Symposium—"Coordinated Health Activities in a Dental Program for the Preschool Child."

I. Pediatrics and Pedodontics
J. M. Coleman 34

II. Orthodontics and Pedodontics
Claude R. Wood 36

III. Care of the Preschool Child by the Private Practitioner
Chas. A. Sweet 39

The Use of Language to Control Child Behavior in the Dental Office
Robert P. Spurlin, Jr. 40

Health Service for School Children
William R. Davis 45

News and Views 48

The President's Message — The Secretary's Message — The College Committee Report — Report of the Committee on Commissions — The Editor's Report.

Book Review

Prevention of Malocclusion
Paul Guy Spencer 64

PEDIATRICS AND PEDODONTICS*

J. M. Coleman, M.D., M.P.H., F.A.A.P.†

The complete growth and development of the child is the aim of pediatric practice whether it be dealing with individuals in private practice or with the mass in public health. Pediatric thought has moved away from the narrow concepts of therapeutic medicine and is now concentrated on the development of unrealized potentialities which lie within the human organism.

Within the bulk of medical knowledge lies a great concentration of information which if properly utilized could contribute to the realization of human values. The fact that medicine and the allied sciences have failed in insuring complete development of the child is shown in the statistics of the draft board. Today, as some twenty years ago, we are seeing vast numbers of our population unfit for service and unfit for coping with the complexities of modern civilization.

Is it necessary that these masses be allowed to come to the very flower of manhood handicapped by defects which we have allowed to develop in our homes, schools, and communities through inadequate knowledge of needs? Can we say in truth that we are making democracy work when one-third of the group is denied an equal opportunity in our competitive existence?

In the pediatric and the public health field we are coming to believe that there is a broad field opening up for medicine and dentistry and allied sciences, a field of true prevention which will yield more satisfactions than any practice heretofore tried. We are trying to adjust our sense of values. Useful human lives mean more to the future of mankind than accumulation of wealth.

The failure to meet the needs of our peoples is due to several things. We cannot ignore the social and economic phases but looking to our professions we find—First of these is the tradition of therapeutics. Most of those who have gone into the field of medicine or dentistry have entered with the concept of amelioration of suffering in the individual. The study, the thought, the attention of these professions has been directed toward the therapeutic efficacy of drugs or procedures so that the fundamental basis of the condition has been ignored in the pursuit of the therapeutic ignis fatuus.

Second—the training in medicine and dentistry has been narrow. Physiology, histology, biochemistry, even bacteriology have been touched lightly and the curriculum has been directed toward pathology and therapeutics. Physical diagnosis has been directed toward finding the defects rather than recognizing the normal.

---

*Presented at the Houston A.S.D.C. Meeting, October, 1941.

†Director Maternal and Child Health, Texas State Dept. of Health.

Third—the ethics of our professions have caused us to look with suspicion on the activities initiated outside the sacred circle. As a result we have tended to ignore the contributions that education, phychology, biochemistry and related fields can make to our understanding of the human organism.

With the assumption of the viewpoint of promoting the development of innate potentialities of the human organism has come the recognition that no single profession, no agency, no group in our population has the answer to the entire problem. Realization of this fact makes it mandatory that there be interchange of information, coordination and integration of programs. The magnitude of the task makes jealousy, narrowness, overlapping and duplication of effort obnoxious. There must be sacrifices, not of honor or success, but of personal or professional aggrandizement to the common good.

No longer can one logically think in terms of mental health, dental health, school health or any of the narrow compartments of effort that have been built in the past. Thought and action must be in terms of total health of the organism and in turn health itself must not mean absence of disease but rather the full, vigorous maturation of the human being into an efficient, contented, and useful citizen capable of serving his fellow man and his nation.

Today the pediatrician looks at the teeth not as to whether a cavity exists but as a signpost related to the progress of the child under his care. He now recognizes that the teeth and peridental tissues are responsive to various conditions arising in the child's existence, they reflect disease processes, nutrition, metabolic processes, general growth and development. He will call on the dentist for aid in recognition of unusual signs which his specialized dental histological training may unravel. With the developmental viewpoint the pediatrist who ignores the need of continued dental care would be most short-sighted.

There is increased recognition of the probable relationships that exist between the teeth and the organs of special sense. Dental defects may lead to assymertical development interfering with the functioning of eyes and ears. There is evidence developing which indicates that malocclusions and malformations of the dental arch may not only play a part in nutrition of the individual but also in the development of bodily assymetries and their related psychological conditions. Where such problems exist, or are suspected, cooperation between these groups is necessary.

From the therapeutic concept the pediatrist will continue to recognize the necessity for correction of dental defects for full efficacy of the therapeutic agents to be apparent, but, there will be constantly in mind the recognition that responsibility does not stop with the healing of the immediate condition, planning will include continued growth and development.

The principal features of the public health dental program now are those embodied in the education which teaches the need for early control of caries.

The next step in this program will be the application of information which comes from research in the field. No public health program for dental health can be successful without research.

Today the State Department of Health is engaged in such a study. The approach to the problem is broad. There is the study of the histology, the pathology, the chemistry, the bacteriology, the nutrition, and the general growth and development of the child. It is believed that only when the information derived from these cooperating fields is brought together that conclusions may be drawn and techniques of prevention devised. We in the pediatric field are greatly encouraged by the progress that is being made. We recognize that it is too early to say that the problem will in the immediate future be solved, but we do believe that now with the approach using specialists from all the various fields for the investigation that such cooperation will produce results which we in our restricted fields have not previously been able to develop.

Austin, Texas.

ORTHODONTICS AND PEDODONTICS*

Claude R. Wood, D.D.S.

I am glad to see orthodontics included in the symposium "Coordinated Health Activities in a Dental Program for the Preschool Child." Often in the discussion of child welfare of the preschool child the consideration of orthodontic treatment either is omitted or tacked on as an extra appendage.

Your asking that orthondontics be included in this symposium is proof enough that already you have accepted the relative value. Rather than take time in presenting the various benefits derived from orthondontic treatment we will enter into a more direct discussion of the problems at hand.

The teeth and supporting structures have been accepted as an integral part of the human body. Evidence has been established that any disturbance in the masticatory apparatus is oftentimes reflected in other parts of the body and it is a recognized fact that disturbances in other parts of the body are reflected in the teeth and supporting structures. To be more specific, we know that if a child's masticatory apparatus is so disturbed that he is unable to masticate properly, the digesitive system in turn is materially effected with resulting stomach disorders. We also know that if the maxillae is very narrow with the resulting high or deep palate, we oftentimes have a deflected nasal septum, which causes a disturbance in the respiratory system. While on the other side of the ledger, if a child is suffering from enlarged tonsils, we often see a resulting protrusion of the lower jaw, which sometimes actually develops into a mesiocclusion. Or a child with adenoids will

*Presented as part of a Symposium on the dental program of the pre-school child at the Houston A.S.D.C. meeting, October, 1941.

develop mouth breathing, causing a lack of development of the dental arches with a resulting distortion, causing facial disharmony. I mention these few deviations to show the close correlation that the teeth and supporting structures have with other vital parts of the human body.

The primary purpose of orthodontics is the correction of dental anomalies. So the orthodontic care of the preschool child should include the correction of any anomaly that exists, or the institution of any preventive measure necessary to keep any anomaly from developing into a permanent disfigurement.

In the preschool child we do find distinct malocclusions—very often the same type and character that exist in the older child. When we find that a distinct malrelation exists between the maxillae and mandible, orthodontic treatment is certainly indicated. To be more specific: when a child of four or five years of age with a distinct distocclusion or mesiocclusion comes under your obesrvation, orthodontic treatment should be instituted. It is a known positive fact that orthodontic interference will at some time be necessary, but by instituting treatment with the very young child it is possible to achieve results in a surprisingly short time. You not only are able to correct the existing deformity in the dental arches, but you also are able to prevent, in most instances, an improper muscular balance. The bony structure in the young child is very pliable and easily changed. It is also surprising how quickly nature will correct the muscular balance when the arches have been restored to normal relation. There are also certain abnormalities that exist in neutrocclusion cases which call for orthodontic treatment. While the amount of good that can be accomplished in the development of the dental arches by using the foundation teeth as a basis for such a development is a debatable question, there is enough proof to justify such treatment in many instances. This especially holds true if the development is started in the very young child before resorption of the roots has started to take place.

The time of treatment as result of habits is also another debatable question, but the same answer holds true as in other maldevelopments of the arches. That is, restore the arch form to normal as soon as possible in order to give nature a chance to continue the development along normal lines.

I would like to show a few slides* illustrating certain types of conditions that you may find in the preschool child—types that are correctable and should be corrected. We shall not attempt to go into the treatment of these cases, but just show the condition as it originally existed.

SLIDE 1

This was a model of a patient five years old. A neutrocclusio classification, but showing a unilateral contraction or a lingual occlusion of the entire upper left side. You would notice a lack of development of the maxillae, as well as an overdevelopment of the mandible, resulting from the

*Since this publication does not carry illustrations, the discussion of the models and slides only is here presented.

stresses of occlusion. This condition, if allowed to exist, could cause a very serious malformation in the permanent dentition. Orthodontic treatment was instituted for six months and the case dismissed. Examinations over a period of two years showed a normal condition, and perhaps no further treatment will ever be necessary.

SLIDE 2

This slide showed occlusal view of a case of neutrocclusion. You could see the small amount of space that is present to accommodate the permanent teeth. It is a physical impossibility for the permanent teeth to come in straight. We sincerely believe that treatment of a few months to develop the arches will prevent a prolonged orthodontic treatment in later years. While it might be necessary to have certain irregularities corrected around eleven or twelve years of age, the early treatment will certainly give nature a chance to develop the arches along normal lines.

SLIDE 3

This slide showed models of a patient four years of age with a distinct mesiocclusion. Orthodontic treatment was instituted, and on the first visit four weeks later this case had gone from an anterior relation to a normal. The appliances were left in place with elastic traction used at intervals for four months; then all appliances were removed. Subsequent examinations for a period of two years showed the arches to be in a normal relation.

SLIDE 4

This slide showed models of a patient four years of age with a very distinct distocclusion. This condition had developed to the point where a facial distortion was present. Appliances were placed, and in a reasonably short time a distinct improvement was noticeable in the facial profile. As stated previously, in these extreme conditions early treatment is certainly indicated.

SLIDE 5

This slide showed models of a patient six years of age with a distinct distocclusion, complicated by an open bite and protrusion of central incisors with a distinct flattening of the anterior portion of the mandible. This resulted apparently from thumb sucking. While this case was started at six years of age, it is very apparent that orthodontic treatment could, and should, have been instituted at a much earlier age.

We have not mentioned complications and irregularities, or corrections due to early loss of the foundation teeth. That would take a paper all to itself. Perhaps we can assume that we have not had to resort to early extractions in this symposium; or, if so, that space maintainers were immediately inserted.

I hope that by these few remarks and illustrations we have shown the need of orthodontic treatment in certain types of malrelations that may exist in the preschool child.

I want to compliment those responsible for the idea and the building of the symposium. I believe it will cause all of us to give more thought and consideration to the problems at hand and will encourage a closer working relationship between all branches of human endeavor seeking for the betterment of the children of our land.

Knoxville, Tennessee.

CARE OF THE PRESCHOOL CHILD BY THE PRIVATE PRACTITIONER*

Charles A. Sweet, D.D.S.

There is an old saying, "Large oaks from little acorns grow," which very well symbolizes a dental practice, so we must all give consideration to the preschool child. We, the private practitioners, do appreciate the increased interest shown in the dental health of the small child. A large part of this increase in interest is due to you, the public health dentists and the dental hygienists.

I wonder how many private practitioners see the child at two years of age. Why not let it be known that it is your desire to see these children this small and to protect them from dental diseases? The physician, the public health dentist, the dental hygienist in public education work and the workers in well baby clinics can be of real assistance to you.

If we are to give adequate care to the preschool child, we must have a good foundation to work upon. Therefore, no stone should be left unturned by the obstetrician, the pediatrician and the dentist in caring for the child from conception to two years of age.

A. Conception to two years of age.

We must interest and educate the physician, obstetrician and pediatrician to our desired dental goal. An adequate prenatal diet must be prescribed to protect the mother and child.

An adequate post-natal diet must be prescribed to protect the child so that normal growth will take place.

We must educate the family physician or pediatrician to recognize dental abnormalities such as enlarged frenums, supernumerary teeth and any other deviations from normal.

B. After two years of age the child should visit the dentist, and the following are some suggestions that will be of great help in protecting the child's dentition.

1. The dentist should observe and record all abnormalities.
2. The dentist should begin regular prophylaxis and should see the child at least every four months.
3. The dentist should *teach* home care of the mouth.

---

*Presented at the Houston A.S.D.C. meeting, October, 1941.

4. The dentist should inform the parent of an adequate diet and that a specialized diet may be necessary for a perfect dentition.
5. The dentist should inform the parent that a blanket diet does not fit every person as there are many individual differences that only a dentist and physician working together can determine.
6. Additional operative procedures should be instituted, such as Ammoniacol $AgNO_3$ as a disclosing agent for prophylactic odontotomy.

Every four months thereafter each one of the above recommendations should be checked and whenever necessary emphasized. We should also encourage parents to keep their children under the care of the child's physician. Whenever it is necessary, have orthodontic consultation and, above all, do all operative dentistry necessary at the earliest detection of tooth destruction.

2940 Summit St., Oakland, Calif.

THE USE OF LANGUAGE TO CONTROL CHILD BEHAVIOR IN THE DENTAL OFFICE

Robert P. Spurlin, Jr., D.D.S.*

An awakened interest in children has been reflected in dental literature and the literature of allied sciences. A host of worthwhile articles pertaining to dental care for children can be found. These articles contain a number of good suggestions on child management in the dental office and in most of them there is mention of the proper, or improper, use of language to influence the child. Probably not enough importance has been attached to the use of language as an aid in the control of child behavior.

It has been said that a great portion of learning comes through the eyes and ears. One has only to look about him to appreciate the influence that language has upon the everyday habits and customs of everyone. The politician well knows the power of the spoken word. Dictators can incite their followers to any desired action by haranguing them with well chosen words.

A more pertinent example for most people is the radio. Are the words extolling the merits of different products spontaneously spoken? Or were the words so chosen that they will stimulate a predetermined and desired response? The words heard and the manner in which they were presented have been calculated to elicit the desired response from the greatest number of people. The dietary habits of many children are influenced by the words of a clever announcer. Radio announcers must rely completely upon their use of words to influence their audience. They are unable to employ visual aids to produce the desired effect. This evidence of the way that language

*State Board of Health, Little Rock, Arkansas.

is used to influence children should serve to remove any doubts about the beneficial way it can be employed to influence child patients.

Americans are creatures of habit. They say what they say because they are accustomed to do so. This is not a country where each word must be carefully weighed before it is spoken. Unfortunately, many people are prone to be careless in their selection of words when they talk to children about dentistry. The fond relative who teases the child about going to the dentist, and the harassed parents who use the dentist as a threat to get the child to behave, certainly have made the dentist's task more difficult. Improper language in the home has ruined many children as dental patients long before they have ever seen a dentist.

Pelton[1] calls attention to the improper use of words in the presence of the child. Children will often see the manner in which an adult reacts to the word "pain," and will later copy the conduct pattern set by the adult. A parent can say "I hate dentists" or "I hate the drilling," and immediately the child decides that he, too, hates the same things. The exaggerated tales of dental suffering so boastfully related by parents may result forever afterward in fear of the dentist on the part of their children. Pelton also stresses the importance of warning the child about impending pain in a manner that doesn't suggest possible danger where there is none.

McBride[2] offers some suggestions that will be of value to any dentist who deals with children. He thinks that proper control of the voice when one talks to children is of paramount importance. The dentist must not betray his emotions to the child by the tone of his voice. Children can quickly detect insincerity and anger in an adult's voice. It is also important to keep one's conversation on a level that the child can understand. The child's understanding of the conversation is greatly aided through the use of short, simple words. Keep the conversation sensible, however. Baby talk and "gushing" over the child are to be avoided.

Lamons[3] recommends the use of questions about things that interest the child as a means to engage the child in conversation. Questions about the child's playmates, his parents, his school and other things in which he is interested are an incentive to get him to enter into a meaningful conversation with the dentist. It is very important that the child's own questions be answered simply and truthfully. Truthful answers will do much to create a feeling of confidence in the dentist. When a child refuses to enter into conversation, Lamons advocates the use of indirect suggestion. Direct the conversation with the parent to the child and things of interest to him. Keep the conversation simple so that he can understand it, and will want to join in the discussion.

Ireland[4] states that is is highly important to make positive remarks such as "You can do it" instead of negative remarks such as "Is it too hard for you?" It is also his opinion that sincerity in one's praise and encouragement of the child is helpful.

Easlick[5] states that it is important to rationalize the operative procedure to the child and build up a sense of fortitude within him. Appeal to the child's juvenile sense of fair play and square dealing. There is another way that the dentist can do much to control the behavior of the child patient. The dentist should seek out the elements in a dental experience that cannot be endured and then help the child to stand them.

Suggestions such as these are often looked upon with suspicion by the average practictioner. He often disregards such suggestions, and seems to feel that these technics are applicable only in the practice of the man who advocates them. Many dentists have expressed the belief that such procedures could be used to an advantage by the practitioner with the average child. Studies in child psychology, however, have shown that these suggestions are logical and sound.

In a text on Children's Fears[6] are found methods to prevent and overcome fear. Fear can be prevented when the child is forewarned about the contemplated experience. Forewarning must be done in a manner and with a voice or words that will not alarm the child. Fear can be overcome by explanation and reassurance. The child fears the things that he doesn't understand.

The use of simple words is advocated in another text on Child Psychology.[7] The average vocabulary of a child three years of age consists of only 1,222 words. The average vocabulary of a child five years of age consists of 2,300 words. Obviously the use of words not in the vocabulary of the child patient makes for a meaningless conversation unless the words are explained by the dentist. To conserve time and to promote a better understanding on the part of the child, it is desirable to use simple words in keeping with his age.

Johnson[8] states that the behavior and response of children is definitely affected by suggestions or instructions in all ages from three to seven. For the most part, those told to do something will attempt to carry out their instructions. Olson and Wilkinson[9] in a study of teaching methods found that there was an improved response on the part of children to constructive language over that of negative or reproving language.

An extensive study of the effects of language on the behavior of children has been carried on by Johnson.[10] Different methods were used to request a group of children to perform tasks. It will be worthwhile to summarize briefly the findings of this study.

1. Specific requests versus general requests. A specific request gives the exact clue to the solution of the problem, and a better response is received.
2. Simple requests versus verbose requests. Complex instructions dissipated the children's attention and failed to focus it on the essential point.
3. Commands versus offering choice. Simple, direct commands were found to be better than offering a choice.
4. Pleasant requests versus scolding. Pleasant requests succeeded more to urge children to attempt tasks they had refused to perform.

5. Hopeful remarks versus depriving remarks. Hopeful remarks encouraged children to persist much longer at difficult tasks than did depriving remarks.
6. Unhurried versus hurried directions. Hurrying a child tends to confuse him and focuses his attention on the hurry rather than the task he is to perform.
7. Positive requests versus negative requests. A positive request directs the child's attention to the thing to be done, and it is much more effective than a negative request telling the child what not to do.
8. Positive remarks versus threats. Positive requests are much more effective.
9. Substitute suggestions versus negative prohibition. Suggesting an alternative is of far greater value to stop an undesired activity than is negative prohibition.

Johnson concludes that there is a significant difference in the behavior and cooperation of children who receive better verbal treatment. The effects of verbal influence diminish with the passing of time, and it is often necessary to repeat instructions to a child.

Olson[11] has conducted some experiments to determine what children do or do not like about the dentist and the dental office. The children with whom he was working suggested the questions used in his study. A list of these questions was made, and each child was asked to indicate whether he liked, disliked or was indifferent to each question. Twelve of the thirty questions pertained directly to the use of language. The results show that thes children like the dentist to explain what he was going to do and how he would do it. They liked the dentist to call them by their first name and to flatter them. They also liked to be warned when the operation was going to hurt, and they liked the dentist to talk about things in which they were interested.

These same studies give one a clue regarding what not to say to child patients. They do not like the dentist to talk about just anything solely to make conversation. Scolding, being teased or being called a baby were disliked. They disliked to have the dentist tell them they would not be hurt when the dentist knew that they would be hurt.

The points brought out in these studies on child behavior substantiate the suggestions advanced by the men practicing dentistry for children. Such suggestions are practical and workable. For this reason a list of these suggestions has been compiled for reference by those dentists who may be interested to apply such suggestions in their practice:

1. Call the child by his first name.
2. Use short simple words when talking to a child.
3. Always be truthful when talking to a child.
4. Answer the child's questions in a sensible manner.
5. Make instructions explicit and brief.
6. Explain to the child what is going to be done, and how it will be done.

7. Rationalize your procedures to the child.
8. Use positive suggestions instead of negative ones.
9. Avoid words that suggest danger such as "pain" and "hurt."
10. Give praise and encouragement judiciously.
11. Do not criticize, tease, scold or threaten the child.
12. Use questions to engage the child in conversation.
13. Govern the language used according to the child's age.
14. Do not use baby talk.
15. Do not let your voice betray your emotions.
16. Give the child sufficient time to understand verbal instruction and to respond.
17. Avoid having instructions conveyed to the child through the parent.
18. Above all, try to understand the child and use his language. Talk to him as to the intelligent individual that he is.

Probably a dentist will never have a child patient who will require the use of all these suggestions. They are worth keeping in mind, since they often can be used effectively to control the behavior of a child. If the dentist will make an honest effort to understand children and their ways he can accomplish much for them. Everyone likes a smile and a kind word. Children especially appreciate kindness and they are deserving of the best that the profession has to offer. The time has come when dentists are expected to render the best services possible for child patients.

REFERENCES

1. Pelton, W. J. Fear control in children's dentistry. J.A.D.A., 26:1377-82, Aug. 1939.
8. McBride, W. C. A few phases of children's dentistry. J. Mich. State Dent. Soc., 19:274-9, Dec., 1937.
3. Lamons, F. F. Psychology and children's dental practice. J.A.D.A., 25:553-61, Apr., 1938.
4. Ireland, R. L. The dentist's responsibility to his child patient. J. Mo. State Dent. Assn., 21:207-18, Nov., 1941.
5. Easlick, K. A. The dentist's management of young children. Inter. J. Orthodont. & Den. for Children, 21:78-87, Jan., 1935.
6. Jersild, A. T. and Holmes, Francis B. Children's Fears. New York, Teachers College, Columbia Univ., 1935. XV+356 p.
7. Johnson, B. J. Child psychology. Baltimore, Charles C. Thomas, 1933. XII+439 p.
8. Johnson, Marguerite W. The influence of verbal directions on behavior. Child Development, 6:196-204, Sept., 1935.
9. Olson, W. C. and Wilkinson, Muriel M. Teacher personality as revealed by the amount and kind of verbal direction used in behavior control. Educ. Admin. & Super., 24:81-93, Feb., 1938.
10. Johnson, Marguerite W. What we say and how we say it. Childhood Educ., 14:359-62, Apr., 1938.
11. Olson, W. C. Talk given in Seminar for postgraduate students, University of Michigan, Nov., 1941.

HEALTH SERVICE FOR SCHOOL CHILDREN*

William R. Davis, D.D.S.

An editorial entitled "Pauperized by Health Service Not by Education" by this writer in the February, 1933, issue of the Journal of the Michigan State Dental Society expressed some convictions which we wish to use as a background for some additional comments. Since that was published nine years ago and is not easily available to most of our readers, a large portion of that editorial follows:

"One never hears that it pauperizes a child to give it education, but continually hears this argument used against health service and we believe the sole reason is the difference in the way the two services are usually administered. In the case of education every child, rich or poor, is entitled to the same service in our public schools, but in the case of health service only the poor are entitled to receive the so-called "free" service if it is obtainable at all. It is this separation which gives the stigma of charity in one instance and not the other—a stigma for which the child is in no way to blame. For the education no questions are asked or investigations made. The child from a pauper family goes to school on exactly the same basis as the child of the millionaire. Both are entitled to the free education. Not so the health service and that brings the humiliation which causes some of the most worthy to shrink from acceptance while others not so conscientious take advantage.

"Why do we have the free education? Because our forefathers believed it so important that every child should have at least the rudiments of education that they established our tax supported free schools. Did those same forefathers know anything about the cause of disease and the wonderful means at our disposal today for promoting the health of children? They did not. Of course, they did not include health service because it was not obtainable at any price.

"But the little red school house and the three R's have grown wonderfully. In Michigan for instance they have expanded at one end to include a vast Kindergarten system and at the other, hundreds of High Schools, eight Junior Colleges, forty-eight County Normals, four State Normal Colleges, a College of Mining and Technology, the Michigan State College of Agriculture and Applied Science and the State University with its Literary, Law, Medicine, Dentistry, Engineering and Pharmacy Colleges. In Detroit we have in addition a City College, Normal College, College of Law, and College of Medicine, all tax supported. In the colleges tuition and laboratory fees are charged but that only supplies a small percentage of the cost.

"In the grades and high schools many other services have been added,

*A timely article carried in the Michigan State Dental Society Journal for January, 1942.

such as free textbooks, special teachers in music, art, manual training, domestic science and athletics. By the way we know of one school in the state where the athletic coach is paid a higher salary than the Superintendent of Schools, and it hasn't a clinic of any kind even for the indigent. Most of our high schools and many ward schools contain gymnasiums and some high schools have swimming pools. Now this editorial is not written in disparagement of any of these services. They all have much to commend them, but are kindergartens, music, art, athletic coaches, etc., more valuable for a child than immunization, eye, dental and other health services?

"Many teachers have told me they could see no difference in high school between the child which had attended kindergarten and the one which had not, but the child denied health service may have his life shortened or his health seriously impaired. This is certainly a much more real misfortune than lack of some of these other things and much more of a liability to society as a whole. Of course, the argument can be raised that we have gone too far in free education and it is a fair and debatable question. It is also fair to ask where are you going to stop in giving the child valuable free services? How about food and clothing? But food and clothing are very much more likely to be provided in the home at least in normal times. * * * *

"Of course, some of these school additions like swimming pools, gymnasiums and athletics make a certain contribution to health, but it is very small in proportion so far as actual health is concerned and not at all to be compared in health value with the services of the nurse, the physician, and the dentist, and yet when economy comes, the latter services are the very first to go as witness the number of school nurses and clinics discontinued the past two years when their services were more than ever needed.

"Pauperizing a child by health service comes only from the fact that it is not administered on the same basis as free education. The value of it is equal to or greater than much of the free education now available to all children. Education that does not include health service is wasteful, for education depends for its usefulness on health. If the state is obligated to provide education and its accessories, certainly there is no logical reason to deny the health service on an equal basis which does not pauperize. If society cannot afford to do this, then would not the reasonable conclusion be to select the services most desirable to the future welfare of the child and curtail in the place that would least affect the future? That might mean providing health service and education for all to the sixth grade, the eighth grade, through high school, or whenever necessity might draw the line, it might mean cutting out some of the accessories, but it seems to me that the present method of prodigality in education and parsimony in health service is untenable."

We believe the above opinions are just as valid today as when written. In fact, even more so, for the past few years have seen much more discussion of the value of and need for more health service, with increasing demand for

its expansion and with some start in that direction. Witness the funds which have been made available for expanded health service by the Social Security Act of the National Government, which has greatly increased the number of full-time health officers and the number of trained health personnel. Many other examples could be cited of the interest and trend in this direction, and experiments that are being tried out.

There is no doubt concerning the great need, as the recent draft board and youth examinations show most vividly. The cry is going up that something must be done. So far as service is concerned, we have only been scratching the surface. This is especially true concerning dental health service. Dentistry admits that adequate dental health service is not being received by over 20 or 25 per cent of the people, while the great majority need it. We know that dental health conditions among our school children, as well as youth and adults, are bad. Health education alone cannot meet the situation. Health education that does not result in service is of no avail, and many cannot get the service. In the urge that something be done the profession is apprehensive. It realizes that there are many problems involved. It fears that popular demand and social trends may bring on some form of unwise expanded government control. But, if the profession wants to maintain leadership in meeting this demand as it should do, it must offer some plan which makes a start towards meeting the situation. Why should not this plan be the recommendation that dental health service for school children be established on the same basis as education is now offered? In the writer's opinion this would do more to preserve the present private practice of dentistry than anything else dentistry could do, because it would show dentistry's willingness to back a practical plan where it could do the most good. It would interfere very little with private practice. Many parents would still prefer their own dentist for their children, as many still patronize the private school. In fact, the proven value of such service would in itself be an educational measure that would undoubtedly increase private practice.

We doubt if adequate dental service for children will ever be met in any other way. It should not be made compulsory. The service could not be provided for all children at once if it were made compulsory. But once it was offered in a few places, the number of places and availability of service would continue to enlarge.

Dental clinics in or near school buildings can be administered efficiently and economically as experience has shown. If offered for all children, it could be administered even more economically and without any stigma attached. School teachers also would be more interested to follow through with health education if the service were available. That lack today dampens their enthusiasm. We believe it is just as important as education and would do much to insure better health of our future youth and adults.

There are many angles to this question which space does not permit dis-

cussion of in one editorial. But we throw it out as a suggestion and invite comment. If you have a better plan, we will be delighted to have it. We believe dentistry must offer some definite and workable plan.

NEWS AND VIEWS

The President's Message

It is a pleasure to have committees go into action with such determination as this year's committees have shown. Action is evident all along the front and I want you to know about some of the things the committees have done and some of the plans for the future.

1. The reports of the College Committee on "The Undergraduate Program in Dentistry for Children," and "Dentistry for Children—Its Nomenclature," have been mimeographed and two copies sent to every dental school, one to the Dean and one to the teacher of Pedodontics in the school. Copies have also been sent to each of the Unit secretaries and to each member of the Council on Dental Education.

2. The sets of questions on Dentistry for Children and Nutrition and the bibliographical citations for each, which the State Board Committee developed last year at the request of the National Association of Dental Examiners, have been revised and mimeographed copies sent to them. In a letter which I recently received from the chairman of this committee, he says, "I discussed these with the chairman of the committee of the National Association of Dental Examiners in Chicago. I am today sending him 48 copies of each set of questions for distribution to the various state boards. He told me six states were clamoring at his heels to get these questions before the coming examinations. He was very pleased with the A.S.D.C.'s work."

3. The Public Relations Committee has a very ambitious program for the year. Besides preparing a statement on the necessity of dentistry for the pre-school child which will augment or replace the present statement as it appears in "The Summer Round-up of the Children—1942" booklet, each member of this committee has been asked to write a fifteen minute radio talk, a 500 to 750 word article on different phases of pedodontics, and a 500 word article on the importance of the primary teeth and the necessity of pre-school dental care. These articles will be distributed by the A.D.A. Bureau of Public Relations.

4. The Membership and State Units Committee has swung into action with a "two fisted" program. A letter has been sent to each state dental director asking his support in securing ten new members, which, according to Jack Wisan, the committee chairman, "would mean 400 new dental health missionaries." The committee's goal of "more than 600," *can* be realized if each of you will help.

5. The program committee has made good progress and the program for the Boston meetings should be completed in the near future.

6. Invitations have been issued to the American Association of Public Health Dentists, the American Dental Hygienists Association and the American Dental Assistants Association to again participate with us in the annual luncheon and the program following the luncheon.

7. The secretary reported on February 24 that the membership for the year stood at about the 300 mark. Having served as secretary for three terms, I know what a task it is when it becomes necessary to send out several notices to the members in order to collect dues. This is also an added expense to the society. I, therefore, appeal to all unit secretaries and to all members who have not sent in their 1942 dues, *DO IT NOW*.

8. The last report from the Board of Trustees of the A.D.A. was to the effect that this year's meeting would be held as scheduled unless the government intervened. It is quite possible that this will happen, also that the meeting place may be changed.

9. I am suggesting to our Editor that the names of all A.S.D.C. members in the armed service be printed in the Journal. If you know of any, won't you help by sending the names and address to the Editor or Secretary?

RALPH L. IRELAND.

The Secretary's Message

At the present writing of the Secretary's Message this official is, as might be expected at this time of the year, still soliciting the current dues of procrastinating A.S.D.C.'ers, and eagerly anticipating their remittances for the year of 1942. As additional incentive it might be encouraging to those of you who have not yet paid your dues to know that upon his receipt of your dues your Secretary will mail you immediately a lovely membership card—this year a "pastel pink." Seriously, we are already well into the year 1942 and this is an official urging to pay your dues before the Secretary finds it necessary, according to his instructions per the Constitution and By-Laws, to drop many here-to-fore desirable members. SEND THAT CHECK NOW to the below designated address!

It is my desire at this time to present the Honor Roll of the A.S.D.C. representing men who have been called to the armed forces of our government. The officers and personnel of the A.S.D.C. wish these men the best of luck and a speedy return to the "normal way of life." Needless to say there are undoubtedly many who have not yet informed the Secretary of being called to the services, and there will be others who will be called. The above wishes are also expressed for these practitioners:

Dr. Harry V. Douglas, Bakersfield, Calif. . . . . Army
Dr. John H. Nesson, Boston, Mass. . . . . Army
Dr. E. Robert Hynes, Melrose, Mass. . . . . Navy

Dr. Clyde H. Ryan, Vancouver, Wash. . . . . Army
Dr. David Weber, Portland, Oregon . . . . . Army
Dr. Wm. R. Price, Portland, Oregon . . . . . Army
Dr. Robert Morris, Oregon City, Oregon . . . . . Army

The Secretary will appreciate information of other A.S.D.C. members who are now in the armed forces or others as they are called.

DR. R. M. ERWIN, JR., *Secretary*
A. S. D. C.
613 Corbett Bldg., Portland, Ore.

COMMITTEE REPORTS*

The College Committee Report†

PART I

The Undergraduate Program in Dentistry for Children

A report on the minimum requirements of an undergraduate program in dentistry for children becomes particularly pertinent at the present time inasmuch as the Council on Dental Education of the American Dental Association is setting up requirements for the approval of dental schools.[1]

Officially, in the past, dentistry for children has not beeen recognized as a definite unit in undergraduate teaching. The failure to give dentistry for children the status of a separate program of dental instruction is evident in the 1935 report of the Curriculum Survey Committee of the American Association of Dental Schools.[2] In this report the program in dentistry for children was submerged to a large extent in a course on the "Application of Preventive Principles." The Committee appeared to feel that instruction in the field of dentistry for children had been adequately covered in its report on other dental subjects. A direct quotation may be inserted from the report:

"The outline in oral anatomy includes special consideration of deciduous teeth and the eruption of teeth. The instruction in histology and embryology deals with deciduous teeth and with the principles of growth and development as applied to oral structures. The suggested courses in personal and mouth hygiene, nutrition, and the application of preventive principles in dentistry emphasize at various points the importance and nature of proper dental service for children, and this phase of dentistry receives further attention in the courses in operative dentistry, dental prosthesis, practice management, and clinical dentistry. The outline of orthodontics, which subject is largely concerned with dental service for children, suggests a course that is

*There follow several committee reports and the Editor's report for which there was not sufficient room in the last Journal of Dentistry for Children.
†Report of the College Committee presented at the Annual Meeting of the American Society of Dentistry for Children, Houston, Texas, Oct. 28, 1941.

considerably more comprehensive than is taught in dental schools at present with possibly very few expections. A special clinic is suggested for dental service for children. It would appear, therefore, that dentistry for children receives adequate attention in the suggested program of instruction." (p. 80)

I. Advisability of a Separate Program

Since the official agencies in the past have appeared to consider the practice of dentistry for children, in the main, as an operative procedure which may be practiced by adult technics, some consideration should be given at once to the advisability of a separate teaching program and the reasons for one.

Few people living in the United States can fail to realize that an accelerated social change is taking place; many, however, may have failed to detect the tremendous implications to the health professions which exist within the framework of recently enacted social legislation. One must recall that one of the first broad aids to National health was the passage, without cut, of an appropriation in 1912 to create a Children's Bureau in the Department of Labor—a Bureau which has been maintained ever since its creation. This Bureau has done considerable in practically every preventive or prophylactic health program to focus attention on the child as a treatment unit.

Particularly significant more recently has been the passage of the Federal Social Security Act of 1935. Although some attention is now devoted to adult dental programs such as those for the Farm Security Administration, National Youth Administration and the Civilian Conservation Corps, the bulk of the emphasis of the Social Security program continues on the child as the unit of treatment. This emphasis is bound to continue because of the efforts of the trained public health dentists who have become a part of the personnel of practically all state health departments. The attention which is being directed toward children nationally indicates that the dental profession may anticipate the development eventually of a compulsory insurance tax supported program for all children, well-to-do and poor. Examples of national programs for children exist already in Sweden and New Zealand.

One may cite, as further evidence of a trend, the fact that most of the dental schools in the United States and Canada have, or are developing, distinct courses in dentistry for children,[3] that a similar emphasis on children's medicine has taken place in the training for medicine, that the greatest per cent of the various so-called state "refresher" courses in dentistry have been offered in dentistry for children, and that the revelation by draft boards of the large number of physical rejections of young draftees due to poor teeth has led public health officials to question severely the effectiveness of dental practice. Whether one likes it or not, the profession of dentistry is entering a new era as far as protective dentistry is concerned.

Attention having been called to the trend toward the consideration of the child as a unit in preventive treatment, something may be said in defense of a separately directed teaching program in the undergradute curriculum. At

the 18th Annual Meeting of the American Association of Dental Schools the objectives of an adequately taught program in dentistry for children were reported following a round table conference.[4] Although dentistry for children like medicine for children consists of a general practice for young patients, certain specific problems develop in a general practice for children which differentiate its procedures from those practiced for adults.

In the practice of dentistry for children, the first problem which develops is one of patient management. Few dentists can approach an appointment with a two-year-old patient with equanimity. The first objective, then is instruction in, and the demonstration of the management of child behavior. Because primary teeth present differences from permanent teeth in anatomical form and because their roots are in the process of resorption, special technics for their management must be developed and taught to students. Similarly, the incomplete calcification of the newly erupted permanent teeth presents special problems of maganement in the mixed dentition. Since the children's operator incurs a definite responsibility for the future occlusion, mouth health and, not infrequently, the general health of his young patients, the third objective in undergraduate teaching is the presentation of information from a variety of areas which may assist to interpret growth and development—dental caries research, nutrition, physical diagnosis, pediatrics, anthropology, orthodontics, embryology, biochemistry and endocrinology. Since the practice of adequate dentistry for children requires an educational technic in order to show parents that certain dental health habits are essential, to convince them of the value and, hence, the necessity for the preservation of the primary teeth, and to teach small children correct mouth hygiene habits, the fourth objective of a well-taught course is the presentation of the educational technics to be used with parents and children. Probably the greatest obstacle to the practice of dentistry for child patients is the failure of the dentist to secure adequate fees, hence a fifth objective, following the round table conference already mentioned, was added to the teaching program, effective treatment planning.

II. Suggested Outline of Minimum Requirements

If an efort to achieve the five objectives which have been listed constitutes a legitimate program in dentistry for children, certain minimum requirements may be suggested.

A. Supervision

One instructor with the status of a director of a separate division shall be designated to supervise all special instruction and clinical practice for children, the amount of his time devoted to this supervision, or the amount of assistance which he will require, being dependent upon student enrollment.

B. Lecture Course

A separate lecture course of 16 hours minimum is suggested to be presented during the junior or senior years. This course should be devised to cover the material which is necessitated by the attainment of the five objectives already listed.

C. Clinical Practice

Special equipment for the practice of dentistry for children is strongly urged. The student's clinical preparation should include the practice of a number of procedures which include restoration of function as well as lost tooth structure. It seems advisable that each student should be given clinical practice in all types of cavity preparation, the preparation of space maintainers, the management of at least one partial pulpectomy in a primary and a permanent tooth, the preparation of restorations for fractured anterior teeth, and some experience with cavity preparation for pre-school patients. It is suggested that clinical operative dentistry be confined to senior students unless junior students have had ample opportunity for previous practice on adults. If facilities permit the use of a children's hospital as a teaching unit, additional training can be given to the student in hospital routine, dental operative procedures for the sick child, the detection of the oral manifestations of certain systemic diseases, and the recognition of the physical signs and symptoms which a dentist may detect.

Experience indicates that approximately 90-100 hours of operating time will constitute the minimum which will be required by the average student to secure sufficient experience in the modified operative procedures and the various clinical technics employed for children. It is quite possible that a limitation of child patients to those who still have some primary teeth may have to be imposed in order to secure adequate experience in the restoration of primary teeth and the management of small child behavior. As a final clinical-practice recommendation it is suggested that a definite schedule of clinical time be provided until sufficient operative practice for children has been secured.

D. Pre-Clinical Courses

Pre-clinical courses include such fundamental sciences as operative technics, dental anatomy, bacteriology, pathology, embryology, nutrition, orthodontic technics and prosthodontics. The clinical application of these sciences to child patients should be taught to the student. The required information and technical skills should be taught with similar basic information and skills that are taught for the other clinical fields of practice. If provision for this basic instruction cannot be arranged to accompany the usual pre-clinical courses (where it belongs logically), such instruction will have to be delegated to a member of the children's staff to present with the regular pre-clinical courses or as a separate pre-clinical course or as an introduction to clinical operating.

Subject requirement follows:

1. Dental Anatomy: Include in the lectures specific material on the morphology of the primary teeth. The laboratory training may include, through the examination of whole and sectioned teeth, study of the external form of the crown, the structure of the pulp chamber and the shape of the root canals.

2. Operative Procedures: Include typical cavity preparations for pri-

mary teeth and relate cavity preparation to the pulp chamber anatomy of these teeth. The preparation of matrices for primary teeth should be demonstrated and the usual foundation in the manipulation of materials should be taught as for general operative practice.

3. Orthodontic Technics: The development of skill in the construction of certain pedodontic appliances seems advisable. Included in this consideration will be the construction of space maintaining devices with a consideration of the application of the principles which are involved in the growth and development of the arches. Experience seems essential in the taking of impressions and the preparation of casts with which to record present mouth conditions and with which to observe the direction of future arch growth or the future development of occlusal relationships.

Once the trend toward the utilization of the child as a unit for preventive treatment in the health sciences is comprehended, it seems logical to emphasize the teaching of dentistry for children to the extent of the delegation of the responsibility for supervision and special instruction to one individual. In order to practice a complete health program for the small patient, however, it should be recognized that dentistry for children, like medicine for children, utilizes the entire field of general practice, and many other cognate fields, and that a tendency to departmentalize this practice to the point of isolation should be deplored. Since the practice of dentistry for children will be exercised most ofen by the general practitioner, at least for some space of time in the future, it seems advisable to integrate all pre-clinical preparation in the usual pre-clinical courses and to teach the student that dentistry for children is one more phase of general practice. At the same time it seems almost axiomatic that the director of the dental program for children be well informed in regard to the instruction in the other fields of dentistry, particularly so in such fundamentals as adult operative procedures and the manipulation of filling materials. It seems, further, that the staff members in all fields of dental instruction should be well informed in regard to the special instruction in dentistry for children. In fact, since instruction in dentistry for children cuts across a number of allied sciences, some outside of the usual curriculum of a school of dentistry, the above statement may be applied in a more limited extent to a cooperative understanding among the various schools of a university campus. Only on a completely cooperative university basis, probably, can dentistry for the child patient be taught under optimum conditions.

B. Elizabeth Beatty
Drexell A. Boyd
John C. Brauer
Ralph L. Ireland
Ruth Martin
John Oppie McCall
George E. Morgan
George W. Teuscher
Kenneth A. Easlick, *Chairman*
1508 Shadford Road, Ann Arbor, Mich.

BIBLIOGRAPHY

1. Council on Dental Education. Requirements for the approval of dental schools. J. D. Educ., 5:211-20, Feb., 1941.
2. Report of the Curriculum Survey Committee, American Association of Dental Schools. A course of study in dentistry. Chicago, Curriculum Survey Comm., 1935. XIII—412 p.
3. Report of the College Curriculum Committee of the American Society of Dentistry for Children. Survey of Dental Schools. Rev. Den. for Children, 6:14-18, First Quarter, 1940, and 6:50-1, Second Quarter, 1940.
4. Proceedings of the 18th Annual Meeting of the American Association of Dental Schools. Am. A. D. Schools, Volume 18, 314 p. (p. 175)

PART II

Dentistry for Children — Its Nomenclature*

Many different terms exist at the present time for the designation of the various tissues, the areas and points in the mouth, the operations on the mouth tissues and the specialties that practice in the mouth. The first dentition, the science of dentistry for children, and a number of other terms which are used by the dentist in a children's practice, share in a general confusion concerning terminology. A scientific recommendation on terminology by the American Society of Dentistry for Children should prove helpful.

So far as a term for the practice of dentistry for children is concerned, a number of terms have been suggested and used at different times. These terms include such suggestions as DENTAL PEDIATRICS, PEDODONTOLOGY, PEDIODONTIA, PEDODONTIA, and PEDODONTICS. The report of the 1939 College Curriculum Committee[1] quoted a survey which seemed to indicate that approximately an equal number of dental teachers preferred to use PEDODONTIA and PEDODONTICS.

Considerable light is shed on a scientifically selected term by the editorial notes of Marcus L. Ward:[2]

Pedio-, Pedo-, Pedi-

Pedio- is a combining form of the Greek *pedion* and it means a plain, sole, instep, etc.

Pedo- is a combining form of the Greek *paidos* and it means child.

Pedi- and *pedo-* are both combining forms of the Latin *pes* which means foot.

-ia, -ics, -ology

-ia is a suffix used for names of diseases as in neuralgia, hydrophobia
alkaloids as in atropia, morphia, strychnia
plants as in dahlia, fuchsia, wisteria
classes of plants and animals as in mammalia, reptilia
various other words as in militia, magnesia, bacteria
(See 2nd ed. International Dictionary†, p. 1232.)

ics is a suffix used in certain sciences and systems of doing things as in

*Report of the College Committee of the American Society of Dentistry for Children, Houston, Texas, Oct. 26, 1941.

*Dunning, W. B. and Davenport, S. E. A dictionary of dental science and art. Phil., P. Blakiston's Son & Co., 1936, XIV + 635 p.

†Neilson, W. A. ed. Webster's new international dictionary, 2nd ed., Springfield, Mass., G. & C. Merriam, 1935. XCVI + 3210 p.

physics, mathematics, hydrostatics, accoustics, athletics, politics, clinics, technics. (See International, p. 1235.)

-ology is a combinig form used to denote

a speaking or saying as in eulogy, tautology

a doctrine, theory or science as in

zoology	histology	radiology
sociology	biology	neurology
physiology	theology	geology
pathology	psychology	bacteriology and several others.

(See International, p. 1453.)

From the foregoing review of the various prefixes and suffixes which have been suggested as selections from which to designate the science of dentistry for children, *pedo-*, the combining form of the Greek *paidos*, appears to be the correct selection for the prefix, while a choice of suffixes may be made between -ics or -ology. Following the trend established through the selection of the term *ORTHODONTICS* by the American Association of Orthodontists, the term PEDODONTICS is given the preference. In less scientific discussions, the use of DENTISTRY FOR CHILDREN may be considered acceptable, not CHILDREN'S DENTISTRY, since it was pointed out at the 1940 Meeting of the American Society of Dentistry for Children that "children do not practice dentistry."

The term most frequently utilized by dentists for the first dentition, probably, is DECIDUOUS. For the lay person, informed in botany, deciduous calls to mind trees which shed their leaves in the autumn. TEMPORARY is a term readily understood by lay people, but one which controverts the dentist's best efforts to teach the value of a regular program for the preservation of the first dentition. The same may be said for BABY. FOUNDATION,[3] which has been suggested to meet such an objection, is something of a misnomer, since the 20 teeth in the first dentition cannot possibly serve as foundations for all of the teeth in the second dentition, while a foundation may be a base for a building or a charitable institution to lay people. In view of the preceding discussion, the term, PRIMARY, is suggested for the first dentition as a term which may be acceptable to the dental profession, significant in its meaning, with no connotation of impermanence and readily understood by lay people. Logically, the selection of PRIMARY as the term for the first dentition would infer the adoption of SECONDARY for the second dentition just as TEMPORARY implies PERMANENT. If the use of the term PRIMARY appears too difficult to popularize with the dental profession, further search for a term that will be satisfactory both to dental health educators and general practitioners will be necessary. In the meantime the use of DECIDUOUS, with the explanation, FIRST, may be recommended to dental health educators. The term, PRIMARY, will be used in the official publications of the American Society of Dentistry for Children.

It is recommended further that emphasis be placed on the use of the

term, FIRST PERMANENT MOLAR, and that the lay term, SIX-YEAR MOLAR be discouraged in scientific papers. Dentistry has become too scientific for the continuation of such lay terms as six-year molar or seven-year central.

The development of a technic for the removal of the coronal portion of an exposed pulp in either deciduous or permanent teeth has led to the extensive use by children's dentists of the terms, PULPOTOMY and PARTIAL PULPECTOMY. PULPOTOMY is derived from the Latin *pulpa* and the Greek *-otomy,* meaning cutting into, while PULPECTOMY is derived from the Latin *pulpa* and the Greek *-octomy,* meaning excision or removal.[2] A choice of either term seems to be good usage.

Three years ago the term, PEDODONTIC APPLIANCES, was suggested to include space maintainers, devices to supply lost teeth or break habits and other appliances to prevent malocclusion.[4] Again this term may be recommended for consideration.

Many perplexing questions of practice confront the children's dentist in the area of growth and development, particularly insofar as malformations of the teeth or peculiarities in their arrangement are concerned. The problems which are created by such deviations as supernumerary teeth, missing teeth, "ectopic" eruption of permanent teeth, fused teeth, twinned teeth, "depressed" or "submerged' primary molars, retained primary teeth and impacted permanent teeth, are such that it seems advisable to select a term to designate this group of unusual developmental conditions.

It seems pertinent, here, to quote from McCoy's discussion of the incompleteness of the term MALOCCLUSION in the April 1941 number of the American Journal of Orthodontics and Oral Surgery:[5]

"Since the conditions which we are called upon to treat are the result of aberrations of growth and function a general term suitable for such conditions is desirable. This, combined with such anatomic designations necessary to describe the structures involved, is essential to complete an understandable plan. Several words suggest themselves, such as ABNORMALITY, MALFORMATION, DEFORMITY, and IRREGULARITY, but the word ANOMALY, which means deviating from the common rule, type, or form, an irregularity, a thing abnormal, not only answers requirements, but is short enough to be euphonious in its use with other terms. Thus we may have DENTAL ANOMALIES, or DENTAL and ORAL ANOMALIES, DENTOFACIAL ANOMALIES, MAXILLARY or CRANIAL ANOMALIES."

If this suggestion were followed, the term, DENTAL ANOMALIES, could be used to designate those conditions in which the teeth have deviated from the normal form, position, number or relationship. The International Dictionary may be quoted once more:

Anomalous from Latin anomalos and Greek anomalos, uneven, irregular.

Deviation from a general rule, method or analogy; abnormal; irregular, as an anomalous proceeding.

Not conformable to established or accepted conceptions of fitness or harmonious combination; out of keeping (p. 109).

Abnormal from Latin abnormis.

Deviating from the normal condition; not corresponding to the type; markedly or strangely irregular (p. 6).

Peculiar from French peculium, private property.

Belonging especially or exclusively to an individual or individuals as property or possessions.

Characteristic of or belonging to one only as a person, place, class, race or nation (p. 1801).

As one studies the propriety of the use of the terms, ANOMALY, ABNORMALITY and PECULIARITY, for any one of the growth deviations for which a generic term is sought, both ANOMALY and ABNORMALITY appear suitable. The term, ANOMALY, however, seems to carry a shade of meaning which is particularly useful to the children's dentist. To an anthropologist, however, an anomalous phenomenon may be an unexplainable phenomenon. Once the anthropologist can explain a development phenomenon on the basis of inheritance, the phenomenon may no longer be considered an ANOMALY but an inherited PECULIARITY. In spite of a possible divergence of opinion between the dentist and anthoropologist, the dictionary definition appears to justify the use of the term which will be recommended, DENTAL ANOMALY.

A DENTAL ANOMALY may develop hereditarily, congenitally or by mutilation. It has become a custom of dentists to speak promiscuously of "congenital" conditions, such as congenitally missing bicuspids. If one refers to congenital (International Dictionary, p. 562), he will find: *Congenital* from the Latin congenitus and French con + genitus (past participle of gingere, to beget).

Existing at, or dating from birth; acquired during development in the uterus as distinguished from hereditary or transmitted by the germ plasm.

Some discrimination may be required to determine, without a family history, whether a missing bicuspid is absent because of some intra-uterine accident to the cells of the tooth bud, because of a peculiar familial trait in the chromosomes which does not permit the formation of the bicuspid or because of failure of postnatal calcification. Since the average period of beginning of calicfication for the bicuspids has been determined by Kronfeld as 1½ to 2½ years, a failure of calcification is purely a postnatal complication and improperly termed a congenital absence. An inexact and indiscriminate use of the term, CONGENITAL, may be questioned.

Reference has been made earlier in this report to an "ectopic" eruption of permanent teeth. This terminology was utilized by Lewis[6] to designate the eruption of a permanent tooth out of its usual position. For example, the wedging of a first permanent molar under the distal contour of the second primary molar results, not infrequently, in a considerable resorption of the roots of the second primary molar and sometimes the complete loss of this

tooth. Such a developmental condition has been called an "ectopic eruption of the first permanent molar."

The International Dictionary (p. 815) furnishes this information:
Ectopia from the Greek ek, out, + topas, place.

Mod. A morbid displacement of parts, congenital or due to injury.

A consideration of this definition appears to justify the use of the terminology, ECTOPIC eruption of permanent teeth.

Some question has arisen regarding the use of the terms, SPACE MAINTAINER and SPACE RETAINER. Dunning and Davenport (p. 519) present the following definition, "SPACE RETAINER, any orthodontic device for holding space made by the loss of a deciduous tooth until the eruption of the adult tooth."

Again the International Dictionary may be consulted:
Maintain from Latin manu tenere, to hold in the hand,

To continue or preserve in or with;

To hold or keep in any particular state or condition. (p. 1484)
Retain from Latin retinere, to hold, keep,

To keep in a fixed place or condition;

To hold secure, intact, or the like. (p. 2126)

When the connotations of MAINTAIN and RETAIN are considered in relation to an appliance to be used in a space created by the early loss of a primary or young permanent tooth, that of RETAIN appears too fixed and rigid for an appliance which frequently must permit some shifting of the teeth adjacent to the space. The term, SPACE MAINTAINER, therefore, is recommended for future use.

The use of the prefixes, *peri-* and *para-*, and the suffixes, *-osis* and *-clasia*, has been discussed in the April number of the Journal of Dental Education.[7] For a better understanding of the significance of these prefixes and suffixes it is recommended that this discussion be perused.

Probably, in a consideration of prospective changes in dental terminology, the trend in the development of an American language should be kept in mind. Mr. Louis Untermeyer, American poet and philosopher, has called attention to at least one trend in his lecture, "The Evolving American Language." America, he points out, is rapidly building its own language. Already an impressive list of words may be submitted that have different meanings in the United States and England. Whether we like it or not, useful, short-cut words are replacing traditional, less useful words. It would seem advisable, however, to make certain that any new, short-cut words which are developed for dentistry will be scientifically derived, accurate in connotation, and useful.

B. Elizabeth Beatty
Drexell A. Boyd
John C. Brauer
Ralph L. Ireland
Ruth Martin
John Oppie McCall
George E. Morgan
Kenneth A. Easlick, *Chairman*
1508 Shadford Road, Ann Arbor, Mich.

BIBLIOGRAPHY

1. Report of the College Curriculum Committee of the American Society of Dentistry for Children. Rev. Den. for Children, 6:14-18, First Quart., 1940, and 6:50-1, Second Quart., 1940.
2. Ward, M. L. Editorial notes during the preparation of the 7th ed. of the American Textbook of Operative Dentistry (unpublished).
3. Kauffman, J. H. Foundation teeth (Suggested as an appropriate name for the deciduous dentition). J. Calif. D. A., 15:9, 27. Jan.-Feb., 1935.
4. Morgan, G. E. Editorial. Rev. Den. for Children, Oct., 1937.
5. McCoy, J. D. Naming dental anomalies: A study of orthodontic nomenclature. Am. J. Orthodont. & Oral Surg., 27:169-78, Apr., 1941.
6. Lewis, S. J. Ectopic eruption of permanent teeth as a factor in permanent loss of deciduous teeth. J. A. D. A., 23:1019-27, June, 1936.
7. Ward, M. L. An editorial experience with the prefixes peri- and para-, and the suffixes -osis and -clasia. J. D. Educ., 5:295-9, Apr., 1941.

Report of the Committee on Commissions

The Committee on Commissions was appointed by President Frank Lamons to consider the possibility of perpetuating the important work performed by certain standing committees. This can be accomplished through conversion of the committees into commissions. The big advantage of the commission is its permanence and its constantly increasing backlog of valuable experience.

Other advantages to be seen in the commission over the committee are:

1. Inasmuch as only a part of the commission's personnel are replaced each year, the time generally spent within committees in becoming acquainted, each member of the committee with the other and with the committee's objectives, will be largely saved.
2. In the commission, long-term and the single-year objectives can be more carefully studied, more completely correlated, and more closely followed without serious interruption year after year.
3. Considerable duplication and much cross-country correspondence common to newly appointed committees can be eliminated.

A three-man commission is recommended, one member to be replaced each year by a new member appointed for a three-year term. The three-man commission is compact, and can be most efficient. The oldest member serving on the commission would automatically become the chairman, and would be well qualified for the office through two previous years of related activity and service.

Where a commission requires broader representation than is possible with three men—as might be the case with the Membership Commission, or more representation in one location — as would be the case with the Program Commission, a special subsidiary committee or committees to serve with it could be appointed either by the Society president or by the commission.

In the recommendation made by the chairman of the current membership committee, Dr. Ralph Ireland, the relationship of commissions to the

society as a whole and to his proposed set up is well illustrated.

Some questions that permanent commissions can answer better than a one-year committee are:

1. Should growing membership be further increased or more carefully restricted?

Turnover in the Society has increased each year. Very nearly half of our membership have been added in the past three years. Some feel that membership should be increased as much as possible as "in numbers there is strength"; others that rapid growth tends to inferior "quality," unwieldiness and inefficiency. Perhaps the two views can be synchronized. In any case this is a study that requires considerable time.

If the Membership Committee were made into a permanent commission the matter could be given longer study. The conclusions of the commission could be kept constantly up to date. It seems that such a commission might be of more value to the society and to its officers than a committee freshly appointed each year.

2. Should annual meetings, Council meetings, and Annual Program be increased?

Annual meetings and program have grown considerably. At present there are four sessions of the Executive Council, one full day's meeting of the general membership, and a half day meeting of Unit representatives is being considered. There are some who feel that the number and length of meetings can develop to a point where they divert considerable attention from the A. D. A.; others who feel despite this that the program should be continually expanded.

Here again a commission could study this at greater length than a committee.

3. Need the society take steps to review its income and budget?

Society income at present is close to $2,000 (estimated) annually. This income has been guarded zealously by each administration and has increased steadily. New expenditures are being made for honorariums, salaries, etc. It is difficult to consider all these matters fully in our crowded Council meetings. For illustration, does the secretary receive sufficient honorarium? How far can and should a society go in this respect? Should a speaker receive an honorarium? Should the society increase or look to methods for decreasing its subsidy to its journal, etc.?

This problem needs careful and lengthly study.

4. What could be done toward co-ordinating the excellent effort of State Units and what should be done toward forming new units?

The suggestion made at the last A. S. D. C. meeting that an afternoon session of unit representatives be held each year at the time of the A. S. D. C.

meetings is good. A commission might do much to assist the President-Elect, who as chairman of the State Unit Committee has a stupendous job.

5. What more can the A. S. D. C. do to enlarge on the work already done toward advancing this field of service in our colleges and our State boards?

Kenneth Easlick's committee is doing a splendid work here. The fact that this is the same committee as last year is illustrative of the benefits that come with retaining the same personnel on important committees.

6. Now then has the A.S.D.C. already served its usefulness? Should it be disbanded?

Certainly not, and this question does not arise as much now as it did two or three years ago. Certainly much still needs to be done to advance dentistry for children.

A carefully selected commission could blue print the steps required to accomplish this goal. Such a commission working from year to year could be of considerable assistance to the society officers and to the Executive Council.

7. What changes need to be made in the A.S.D.C. constitution to bring it to date?

Some revisions seem to be needed to better correlate the efforts of State Units with that of the Society. Since matters relating to the constitution arise at nearly every annual meeting, a commission could be infinitely better informed on these matters than a committee.

These are only a few of the important questions which take time to answer. Permanent commissions are in the nature of their permanency better equipped to work out the answers and have them available for the Society and its officers.

It is suggested that the Society can under-take this plan beginning with one commission. We would suggest the Membership Commission. If the undertaking works to the complete satisfaction of the Society, then other selected committees can be converted into commissions next year or as this is felt advisable.

It is recommended that a Committee on Commissions be appointed again for next year to study the mechanics and further detail for proceeding with the changes suggested.

This report is respectfully submitted.

CHARLES A. SWEET,
WALTER T. MCFALL,
RALPH L. IRELAND,
KENNETH R. GIBSON,
SAMUEL D. HARRIS, *Chairman.*
2312 Eaton Tower,
Detroit, Mich.

EDITOR'S REPORT

Samuel D. Harris, D.D.S.

Your publication this year in keeping with its change from a Review to a Journal followed the policy of devoting major attention to articles of scientific interest relating to dentistry for the child. In addition it carried in each issue some comments relative to the activities and views of members of the Society.

Two items of major interest to enlargement of your Journal, and to an increase of its circulation, have been the prospect of a considerable subsidy and the possible acceptance of advertisement material.

The matter of subsidy came very close to realization through the repeated and persistent efforts of Dr. Kenneth Gibson. It is still a possibility and the Editorial Board is investigating it. The matter of bolstering Journal revenue through selected advertisement material is also being investigated. More shall be developed in this direction in the coming year.

Copies of the Journal have been mailed to several A.S.D.C. members who have been very active in employing these for the establishment of new State Units or for interesting enrollment of new members into the Society.

Circulation has kept apace that of the previous year. Where cost for printing and distribution of the Journal was $474.05 in 1940 it was $479.40 in 1941. Last year there was a Managing Editor's expense. This year your Editor has done the galley proofing and editing with the assistance of Dr. McBride and Dr. Easlick and as a result the savings to the Society has been considerable.

Dr. Easlick has contributed a large share of the editing this year, has provided numerous papers, and has co-operated to lessen the work of the Editor very materially.

In conclusion your Editor wishes to express his deep gratitude to Dr. Easlick, to the Editorial Board, to the Contributing Editors and to the readers of the Journal for their patience and for their readiness at all times to offer encouragement and assistance.

This report is respectfully submitted.

2312 Eaton Tower, Detroit, Michigan.

BOOK REVIEW

Prevention of Malocclusion

This latest text on orthodontics has been written by Paul Guy Spencer of Waco, Texas, a former president of the American Association of Orthodontists. It is published by the C. V. Mosby Company of St. Louis, 1941.

The purpose of the book is clearly stated in the preface: "to supply—a long-felt want of the general practitioner of dentistry." The specialist in orthodontics is not considered by the author in his approach to the subject, which is both elementary and practical, and definitely not super-scientific. The orthodontist will find the work stimulating however. This long-felt want of the general practitioner is a source of fundamental elementary information on preventive orthodontics, so written that he may become qualified to recognize the more common early signs of the developing malocclusion of the teeth, and thereby either administer timely preventive therapy himself or refer his patient to an orthodontist.

The author constantly reminds the reader of the evils of the mail order laboratory appliance and its accompanying "diagnosis" and "plan of treatment." He also attacks the "course of least resistance" all too frequently employed by dentists who state in doubtful cases that "nature will probably correct this condition." Here is a text that should work wonders for the dentist. Here he may find a sound answer to many an embarrissing question concerning orthodontics.

The book is adequately illustrated with two hundred and seventeen plates distributed through its two hundred and fifty-two pages. The contents, by chapter titles, include: Possibilities and Limitations of Prevention, Anatomy of the Dentures, Child Psychology, Classification, Records, Growth and Development, the value of X-Ray in Observation, Inheritance, Diet, Internal Secretion, and Preventive Treatment. The latter is thoroughly covered in four chapters, and comprises about one-quarter of the text.

The book is new in purpose and approach, is soundly written, and shows every evidence of careful preparation. It is surely recommended reading and a recommended office reference text.